Lesson 1.3 • Five-Number Summaries and Box Plots

Name _____ Period _____ Date _____

1. Find the five-number summary for each data set.

a. {37, 44, 5, 8, 20, 11, 14}

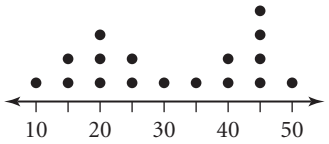
b. {10, 1, 3, 4, 30, 4, 20, 22, 10, 25, 30}

c. {25, 27, 33, 14, 31, 16, 22, 24, 43, 25, 37, 39, 42}

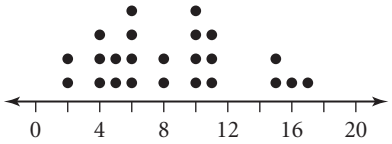
d. {35, 17, 2, 32, 47, 13, 22, 7, 21, 55, 5, 52, 34, 41, 25, 8}

2. Circle the points that represent the five-number summary values in the dot plots below. If two data points are needed to calculate the median, first quartile, or third quartile, draw a circle around both points. List the five-number summary values for each plot.

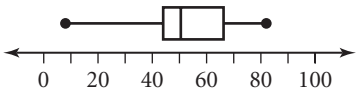
a.



b.



3. Which data set matches this box plot? (More than one answer may be correct.)



a. {70.2, 52, 24.5, 61, 77, 26, 9, 51, 64, 28, 54, 28}

b. {59, 47, 79, 8, 65, 42, 23, 70, 82, 62, 48, 42, 52, 67.5, 49, 46}

c. {82, 36, 42, 8, 61, 50}

4. Create a data set with the five-number summary 6, 10, 12, 15, 20 that contains each number of values.

a. 11

b. 12

5. This table shows the number of bachelor's degrees earned in various fields at a private university for 1994 and 2004.

Bachelor's Degrees Awarded

Degree field	1994	2004
Architecture	76	78
Biological sciences	158	172
Business and management	410	422
Computer science	132	205
Cultural studies	25	46
Education	247	261
Engineering	351	370

Degree field	1994	2004
English literature	129	143
Law	18	29
Mathematics	62	65
Philosophy	43	52
Physical sciences	107	110
Visual and performing arts	154	141

a. Give the five-number summaries and the mean for each data set.

b. Create a box plot for each data set on the same number line.